

ember, intruded upon both the constitutional rights of the Congress and the religious liberty of the American people by issuing their controversial proposed revenue procedure for tax-exempt private schools.

This proposal, for a great many constitutional and moral reasons, should be soundly rejected. It should come as a surprise to no one but an insulated Washington bureaucrat that this regulatory scheme has elicited from the American people more written protests than has any other single bureaucratic notion. The tax bureaucrats have been inundated by thousands of letters from individual citizens and hundreds of petitions and protests from citizen groups in every State of the Nation.

One of the most effective, and largest, of these citizen groups is Christian Voice, a national organization of over 100,000 concerned ministers and Christian laymen. Christian Voice has issued an excellent manual entitled "The IRS versus Christian Education and the First Amendment" which is being distributed to churches all across the Nation.

As one of the several advisers of Christian Voice drawn from the Senate, I am pleased to commend to my colleagues the excellent work being done by this dynamic Christian organization. I particularly commend to my colleagues my introduction to the manual written by Dr. Robert J. Billings, who has provided an outstanding explanation of the constitutional, moral and religious grounds upon which the IRS proposal should be rejected. I ask that it be printed in the RECORD.

The material follows:

FOREWORD

(By Dr. Robert J. Billings)

The arrogance of a bureaucratic agency is never so obviously seen as in the recent IRS document "Proposed Revenue Procedure for Private Tax-Exempt Schools" as found in the Federal Register for August 22, 1978. With total and utter disregard for historic and constitutional church-state separation, Mr. Jerome Kurtz and his agents, the vanguard of the Carter Administration's Machavellian policy, would deny Christian and private schools their unalienable, God-given rights. To add insult to injury, this "Proposed Procedure" assumes guilt rather than innocence, considers tax-exemption a government subsidy, and contrary to the Civil Rights Act, pressures private schools to adopt a racist policy, for the proposed procedure asks that private schools hire some teachers solely on the basis of race, vigorously recruit some students on the basis of race, and offer scholarships on the basis of race.

Is the IRS attempting this unwarranted encroachment upon our private schools? Is it because the private schools are an inferior product? Is it because the students graduating are unAmerican or upon our society? The answers are obvious and even harder to explain. One answer is control. Big Brother wants to know what we think and what we do. The second answer is economics. With teachers walking the streets, the Federal Trade Commission, and the federal government doing nothing better than to empty our schools, thus filling the public schools and creating a necessity for hiring work teachers.

Also the question of academic excellence on any standardized test, the

Christian schools' student outstrips his public school counterpart by one to two years.

We must not settle for a watered-down version of this proposal, but a complete abandonment of it. We will not accept any proposal that allows a breakdown of that great wall of separation that exists between church and state.

It makes no sense to create this hardship for the private schools. In a pluralistic society, it is absolutely essential that private schools have the right to exist, that parents have the right to teach their life values to their children, and that this should be available without some bureaucrat creating an atmosphere of hostility between the public and private schools. Private school students are patriotic, God-fearing, freedom-loving, disciplined, and educated. Most of these schools accept no government subsidies or aid, saving the government countless millions of dollars.

The conclusion is simple: Let the IRS do what the Congress has mandated and stay out of legislative processes; let the IRS abide by the Constitution, especially the First and Fourteenth Amendments; and, let the IRS refuse to become a party to a church/state entanglement. As one speaker said at the recent hearings:

Let the government do their job with their money,

Let the Church do their job with God's money.

Let the church ask no money from the government,

Let the government ask no money from the church.

Let's continue to do what has worked so well for more than 200 years . . . you go your way . . . and I'll go God's.

NEW INCENTIVES FOR INNOVATION: THE UNIVERSITY AND SMALL BUSINESS PATENT PROCEDURES BILL

Mr. BAYH. Mr. President, on February 9, 1979, I was joined by 14 of my Senate colleagues in introducing S. 414, the University and Small Business Patent Procedures Act. I am happy to announce that 9 additional Senators have joined us in supporting this important bill.

I have been greatly pleased about the widespread public support that this bill has received. The problems of lagging innovation and productivity have now become so obvious that clearly the mood of the country is that it is now time for the Congress to begin addressing this very way of life. S. 414 is a good beginning in this effort.

The bill is a careful balance between the rights of the Federal Government to enjoy the fruits of its research and the equally important rights of the public to have the promising inventions made each year under our research available to it in the marketplace. The list of co-sponsors of this legislation dramatically shows that this effort to create for the first time a uniform Government patent policy for inventions made under federally supported research has broad, bipartisan support.

On March 14, 1979, the Executive Committee of the Small Business Legislative Council, which represents over 4 million businesses endorsed the University and Small Business Patent Procedures Act. I hope that my colleagues who

have not carefully reviewed this legislation will take the opportunity to do so and that this Congress will take the historic step of enacting a competent, uniform Government patent policy.

I submit for the RECORD an article which appeared in the March 15, 1979 Wall Street Journal which is an excellent explanation of the problems encountered under the present Government patent policies and their effects on innovation and the spirit of invention in this country.

The article follows:

PUBLIC MONEY AND PRIVATE GAIN

(By Arlen J. Large)

WASHINGTON.—Any discussion of what's wrong with government patent policy could well start with the saga of sick salmon.

Oregon State University researchers have developed a way of making salmon fingerlings immune from a virus disease that ravages hatcheries. The technology involves ways of weakening the live virus and spraying it on the fish. A private company estimated it would have to spend \$700,000 to put the virus into commercial production. To protect that investment, it asked for a license granting exclusive rights to sell the virus for six years.

School officials were willing, but the original research had been partly financed by the U.S. Departments of Commerce and Interior. These agencies refused to go along with the six-year license, and the deal fell through. The hangup over the use of public money for potential private gain has caused "a marked delay" in bringing the fish-saving technology to market, says Ralph Shay, Oregon State's assistant dean of research.

It's the continuation of an old, old argument. Do government rules thwart the transformation of a federally financed invention into a commercial product the public can buy in the marketplace? One side holds that if the government bankrolls a discovery, then it's rightfully the people's product and should be available to everybody; with no one producer allowed a patent monopoly.

The opposing view insists that if all producers can have a government invention, then no one will want it, because there's no profit in spending a lot of money developing a marketable product that anyone can legally copy. This, it's said, is the reason why private producers have obtained licenses to exploit less than 10% of the 28,000 patents owned by the government and available for copying.

DECLINE OF INNOVATIVE SPIRIT

The argument has been merely smoldering in recent years, but it could heat up again soon in connection with a Carter administration study on how to cure an alleged decline of the innovative spirit within U.S. industry. The study, to be sent to the White House later this month, will include possible changes in patent policy. Under discussion are some changes dealing with patents generally, such as a possible extension of the current 17-year life of a patent monopoly and ways to make patents less vulnerable to being overturned in court.

But the innovation study also is prompting a new look at the narrower but hotly controversial question of who should have control of inventions arising from government-financed research. Currently it's rather easy for a company to get a nonexclusive license from the government to put such an invention on the market, but this means its competitors can, too. In a report to the Commerce Department, an advisory panel of private patent experts chaired by Robert Benson, an Allis-Chalmers Corp. lawyer, said this all-comers availability is part of the innovation problem:

"If the results of federally sponsored R&D do not reach the consumer in the form of tangible benefits, the government has not completed its job and has not been a good steward of the taxpayer's money. The right to exclude others conferred by a patent, or an exclusive license under a patent, may be the only incentive great enough to induce the investment needed for development and marketing of products."

Stating the opposite view, Admiral Hyman Rickover, the Navy's veteran apostle of nuclear-powered ships, has told Congress that granting of exclusive licenses "promotes greater concentration of economic power in the hands of large corporations; it impedes the development and dissemination of technology; it is costly to the taxpayer; and it hurts small business." He maintains that "the rights to inventions developed at public expense should be made available for use by any U.S. citizen."

In practice, however, neither of the hard-line positions has been fully triumphant. The way the government grants rights to inventions it has financed is messy, with different agencies wandering all over the lot. Some 20 separate statutes and regulations govern how the various bureaucracies treat patent rights. The Pentagon, the government's biggest font of R&D contracts, generally lets an inventing company keep the rights to an invention, Admiral Rickover's view notwithstanding. The more restrictive law which created the Energy Department allows it to let a contractor keep an invention for exclusive use. But few such waivers have been granted, except to small businesses.

And the policies keep changing. The National Technical Information Service, a cubbyhole in the Commerce Department, in recent years has increasingly tried to act as a clearing house for companies interested in using government-owned patents. It publishes descriptions of inventions to which the government has retained title and invites potential producers to ask for licenses of the nonexclusive, anyone-can-have-it variety. But if there have been no takers after six months, a single company is eligible to ask for an exclusive license granting a five-year monopoly on the invention.

"We haven't been getting a hell of a lot of attention," says Douglas Campion, a patent specialist at the agency. Only a "handful" of nonexclusive licenses have been awarded for government-owned inventions, such as a special kind of paint developed by the Navy. But Mr. Campion says negotiations with several companies for five-year monopoly licenses are under way, and he predicts: "In the next few years we're going to be able to point to some real successes."

In carrying out government-financed research, university scientists occasionally come up with an invention showing commercial promise, such as a computer component developed at the Massachusetts Institute of Technology. The Health, Education and Welfare Department and the National Science Foundation, which both give a lot of research money to universities, have worked out an elaborate arrangement designed to ease the progress of these inventions into the marketplace.

Under current rules, these agencies can sign what are known as institutional patent agreements, or IPAs, with universities that have shown a knack for peddling their inventions to companies that will produce them. With such an agreement in effect, a university can become the owner of a patented invention resulting from government-financed research and can give a monopoly license to a private production company for up to five years.

After months of haggling among patent lawyers from several federal agencies, rules were proclaimed early last year with the aim of spreading the use of these insti-

tutional patent agreements through the government. This, in turn, rang warning bells on Capitol Hill, where some lawmakers feared a trend toward "giveaways" to private monopolists of inventions paid for by the public. Democratic Sen. Gaylord Nelson of Wisconsin, chairman of the Senate Small Business Committee, asked the administration to suspend the new rules while he held hearings.

At the hearings last spring, university officials made a strong defense of IPAs, and Sen. Nelson came away impressed. "Based on what I heard," he says now, "the IPAs with non-profit organizations and universities seem pretty well designed and in the public interest. We found nothing that would indicate that there's anything wrong with them, though there may be somewhere."

The government-wide IPA rules were reinstated last July, and other agencies were free but not required to take them up. "Nothing has happened," says Howard Bremer, president of the Society of University Patent Administrators and a patent lawyer at the University of Wisconsin. "No agency that didn't have an IPA plan has adopted that approach."

The confusing rules could be tidied up in part by a bill sponsored by Republican Sen. Robert Dole of Kansas and Democratic Sen. Birch Bayh of Indiana. Generally, it would allow universities, nonprofit institutions and small businesses to own 17-year patents on inventions made under federal R&D contracts. The patent-owners, in turn, could grant exclusive or nonexclusive five-year licenses to companies that would produce the invention. The bill would, in effect, put on the lawbooks the main features of institutional patent agreements for universities, and extend them to small businesses.

PRESSURE FOR COMMON POSITION

The Dole-Bayh bill, along with the elaborate innovation study itself, puts pressure on contending factions within the administration to arrive at a common position on patent policy. Despite the sick salmon episode, the Commerce Department traditionally has advocated giving R&D contractors easy access to patent rights, and is pressing this viewpoint in the internal debate. The Justice Department, traditionally hostile to anything smacking of monopoly, says it's reassessing its position.

A more uniform patent policy applying to all federal agencies that bankroll research by private companies and universities probably would be desirable. However, it may be neither desirable nor possible to treat all inventors alike. Small companies tend to have the strongest need for a patent monopoly, which may be a precondition of getting venture capital for bringing the new product to market. Bigger companies with established market positions tend to show less interest in patent protection.

It's clear, in any case, that worries over the innovation "lag" are building pressure for change in patent policy. Donald Dunner, a Washington patent lawyer who's president-elect of the American Patent Law Association, thinks something may come of it. "Right now," he says, "the atmosphere is much different than it was just a few months ago."

ON RISKS, NUCLEAR AND OTHER

● Mr. DOMENICI. Mr. President, I submit for the RECORD an editorial from yesterday's Washington Post that highlights the problem of examining the risks of nuclear power in a vacuum. As the Post points out, the risk of producing electricity is a question of relative risks. If we do not use nuclear power we will use something else, most likely coal. Coal

has clear and substantial health costs in both mining and burning it. Often unmentioned is that coal also creates a nuclear hazard. In fact, the radioactivity discharged in the flash of a coal fired plant is more than that allowed from a nuclear powerplant. Additionally, coal has a waste disposal problem. The sludge from today's scrubbers is an environmental hazard, and although the problem is less than the utility industry would have us believe, it is real.

Accordingly, Mr. President, I would like to commend the Post for adding a rational voice to the debate on nuclear power. I ask that the full text of the Post editorial be printed in the RECORD.

The article referred to follows:

ON RISKS, NUCLEAR AND OTHER

Two men were killed a few days ago when the roof collapsed in the Scotia Coal Company's mine near Oven Fork, Ky. It's the same mine in which 26 men were killed three years ago. In this week's accident, a third miner was apparently saved by the protective canopy of the machine he was operating. The mining company has been contesting the rule requiring canopies.

A day earlier, and light years distant, the federal Nuclear Regulatory Commission had ordered five power reactors shut down. A design error had come to light, suggesting that some of the piping might not withstand a severe earthquake. How severe? Reactors are typically designed to survive the most powerful earthquake that might occur over a span of 10,000 years. The NRC is doubtless correct in thinking that the American public is intolerant of risk in reactors.

The cases of the coal mine and the reactors are tied together, of course, by the demand for electricity. Coal generates half of the nation's electric power, and nuclear reactors about one-eighth. In all matters concerning coal, this country is comparatively relaxed about health and safety protection. But in everything that touches nuclear power, it is increasingly cautious. Americans are highly selective in their perceptions of risk.

Perhaps part of the explanation is that nuclear power is new, carrying with it unfamiliar and especially frightening new dangers and evoking new standards. Coal has been around for a long time and, though its costs to human life are large, they are familiar. Coal became part of our lives when people were poorer and life was cheaper. Usages established then still seem to influence attitudes today. It surprises no one that from time to time a mine should lapse and men die. Nor does it surprise one that, after ugly accidents, mines reopen and men continue to work in them.

But, in terms of health hazards, coal is less dangerous than burning. Statisticians have repeatedly shown that pollution resulting from coal-fired plants results in shortened life spans for a population affected by it.

A nuclear reactor makes a sizeable measurable contribution to the radiation which the public is exposed—an amount for dangerous pollution. How does it compare with that of coal? There have been many studies and, while the are not precise, they demonstrate that coal imposes a much greater cost to health, perhaps 100 times as high when measured in terms of premature deaths.

A lot of Americans are deeply concerned about reactors, wondering whether they will explode disastrously or perhaps be leaking radiation. Yet the greater risks of coal are generally met with the attitude that it's one of the things that you have to live with.

The sudden shutdown of the